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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,321	12/12/2003	Alain Azagury	IL920030052US1	2268

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IBM CORPORATION
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EXAMINER

ENGLAND, DAVID E

ART UNIT	PAPER NUMBER
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2443

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06/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/735,321

Applicant(s)

AZAGURY ET AL.

Examiner

DAVID E. ENGLAND

Art Unit

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38 and 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

1. Claims 38 and 39 are presented for examination.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 38 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 5, 8 – 11, 16-21, 39-42 and 44 of copending Application No. 12/062211’s amended claims dated 03/10/2010. Although the conflicting claims are not identical, they are not patentably distinct from each other because Applicant attempts to overcome the double patenting rejection by changing emulation processor with emulation “device” in 12/062211. It is obvious that the device has a processor which could be interpreted as having all the functionality of the copending case that is still a processor.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

<p>Application 10/735321.</p> <p>Claim 38. A computer system, comprising:</p> <p>a local area network (LAN);</p> <p>a plurality of computers without on-board user interface controllers, each of the plurality of computer being coupled to the LAN and being in communication with each other over the LAN, each of the plurality of computers comprising;</p> <p>at least one central processing unit (CPU)</p> <p>a system controller being coupled to the at least</p>	<p>Application 12/062211</p> <p>Claim 1. a local area network (LAN);</p> <p>a plurality of input/output (I/O) devices being coupled to the LAN; and</p> <p>a plurality of computers without on-board user interface controllers, each of the plurality of computers being coupled to the LAN and being in communication with each other and the plurality of I/O devices over the LAN, each of the plurality of computers comprising- a system controller;</p> <p>at least one central processing unit (CPU) being coupled to the system controller; and a plurality of on-board I/O device controllers, consisting of:</p>
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one CPU	at least one LAN interface being directly coupled to the LAN and connected to the system controller; and Also, Claims 8 and 17.
	2. The system according to claim 1, wherein the computers and the console are arranged to communicate over the LAN by transmitting Layer 2 data frames. Also, Claims 18, 25 and 32.
a console comprising a user input device and a user output device, said console being coupled to communicate over the LAN such that the console encapsulates an input received via the user input device into incoming data frames, conveys the incoming data frames over the LAN to each of the plurality of computers, de-encapsulates outgoing data frames received by the console from each of the plurality of computers over the LAN into an output for display using the user output device a plurality of input/output (I/O) devices being	39 The system according to claim 1, wherein the plurality of I/O devices comprise a console having a keyboard, a mouse, and a video monitor, the console being configured to permit a user to access the plurality of computers. 40. The system according to claim 39, wherein the console encapsulates inputs provided by the user via one of the keyboard and the mouse into the incoming data frames for transmission over the LAN to the plurality of computers. 41. The system according to claim 39, wherein the console de-encapsulates outgoing data files

coupled to the LAN, the plurality of I/O devices comprising the user input device and the user output device of the console, each of the plurality of computers being in communication with the plurality of I/O devices over the LAN	received from the plurality of computers for display to the user via the video monitor.
wherein the plurality of computers and the console are arranged to communicate over the LAN by transmitting Layer 2 data frames	Claim 2, 18, 40, 42 and 44
wherein the plurality of computers and the console are arranged to convey the input and the output by tunneling over Layer 2 on the LAN	Claims 3, 19
wherein the plurality of computers are arranged to transmit the outgoing data frames over the LAN to the plurality of I/O devices,	Claim 2, 18, 40, 42 and 44
wherein each of the plurality of computers further comprises a plurality of on-board I/O device controllers, consisting of: at least one LAN interface being directly coupled to the LAN and connected to the system controller	Claim 1 (cont'). each of the plurality of computers being coupled to the LAN and being in communication with each other and the plurality of I/O devices over the LAN, each of the plurality of computers comprising: at least one CPU being coupled to the system controller;

<p>an emulation processor, said emulation processor being directly coupled to the system controller, the emulation device comprising:</p> <p>I/O trap logic being directly coupled to the system controller, the I/O trap logic being configured to intercept and trap a plurality of outputs sent by the at least one CPU to the plurality of I/O devices, to pass a plurality of inputs received from a service processor of the emulation device to the at least one CPU via the system controller, and to emulate behavior of the plurality of I/O devices to the at least one CPU and the system controller; and</p> <p>the service processor being directly coupled to the I/O trap logic, the service processor being configured to receive the intercepted and trapped plurality of outputs from the I/O trap logic, to encapsulate the received plurality of outputs into the outgoing data frames, to transmit the outgoing data frames via the at least one LAN interface through the LAN for delivery to the</p>	<p>Claim 1 (cont') an emulation device being directly coupled to the system controller, the emulation device comprising:</p> <p>I/O trap logic being directly coupled to the system controller, the I/O trap logic being configured to intercept and trap a plurality of outputs sent by the at least one CPU to the plurality of I/O devices, to pass a plurality of inputs received from a service processor of the emulation device to the at least one CPU via the system controller, and to emulate behavior of the plurality of I/O devices to the at least one CPU and the system controller; and</p> <p>the service processor being directly coupled to the I/O trap logic, the service processor being configured to receive the intercepted and trapped plurality of outputs from the I/O trap logic, to encapsulate the received plurality of outputs into outgoing data frames, to transmit the outgoing data frames via the at least one LAN interface</p>
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plurality of I/O devices, to receive the incoming data frames via the at least one LAN interface sent by the plurality of I/O devices through the LAN, to de-encapsulate the received incoming data frames into the plurality of inputs, and to convey the plurality of inputs to the I/O trap logic for emulation to the at least one CPU via the system controller	through the LAN for delivery to the plurality of I/O devices, to receive incoming data frames via the at least one LAN interface sent by the plurality of I/O devices through the LAN, to de-encapsulate the received incoming data frames into the plurality of inputs, and to convey the plurality of inputs to the I/O trap logic for emulation to the at least one CPU via the system controller
wherein the emulation processor is arranged to encapsulate the plurality of outputs in any of Ethernet frames, Internet Protocol (IP) packets	Claims 4, 9, 10, 20, 42
wherein the plurality of computers and the console are arranged to encapsulate the input and output in any of Internet Protocol (IP) packets for transmission over the LAN and using an application-layer protocol	Claims 11, 16, 21

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending

application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dai (2005/0049848) in view of Autrey et al. (5774695), hereinafter Autrey.
6. Referencing claim 38, as closely interpreted by the Examiner, Dai teaches
7. a computer system, comprising:
8. a local area network (LAN), (e.g., ¶ 0027);
9. a plurality of computers without on-board user interface controllers, each of the plurality of computer being coupled to the LAN and being in communication with each other over the LAN, each of the plurality of computers comprising:
10. at least one central processing unit (CPU), (e.g., ¶ 0031 & Figures 1 – 3, The server is controlled through the network from another node.);
11. a system controller being coupled to the at least one CPU, (e.g., ¶ 0031),
12. a console comprising a user input device and a user output device, said console being coupled to communicate over the LAN such that the console encapsulates an input received via

the user input device into incoming data frames, conveys the incoming data frames over the LAN to each of the plurality of computers, de-encapsulates outgoing data frames received by the console from each of the plurality of computers over the LAN into an output for display using the user output device, (e.g., ¶ 0029 & Figure 2 & ¶ 0041, "API", It is well known in the art that in order to communicate information in a computer network using the OSI model of communication, one must encapsulate and "de-encapsulate" packets and frames in order for the application level to use the received information or to send information to another device in a network or LAN.); and

13. a plurality of input/output (I/O) devices being coupled to the LAN, the plurality of I/O devices comprising the user input device and the user output device of the console, each of the plurality of computers being in communication with the plurality of I/O devices over the LAN, (e.g., ¶ 0029 & Figure 2),

14. wherein the plurality of computers and the console are arranged to communicate over the LAN by transmitting Layer 2 data frames, (e.g., ¶ 0029 VPN),

15. wherein the plurality of computers and the console are arranged to convey the input and the output by tunneling over Layer 2 on the LAN, (e.g., ¶ 0029 VPN),

16. wherein the plurality of computers are arranged to transmit the outgoing data frames over the LAN to the plurality of I/O devices, (e.g., ¶ 0031 & Figures 1 – 3, The server is controlled through the network from another node.),

17. wherein each of the plurality of computers further comprises a plurality of on-board I/O device controllers, consisting of:

18. at least one LAN interface being directly coupled to the LAN and connected to the system controller, (e.g., ¶ 0029 - 0032); and
19. an emulation processor, said emulation processor being directly coupled to the system controller, the emulation device comprising:
20. I/O trap logic being directly coupled to the system controller, the I/O trap logic being configured to intercept and trap a plurality of outputs sent by the at least one CPU to the plurality of I/O devices, to pass a plurality of inputs received from a service processor of the emulation device to the at least one CPU via the system controller, and to emulate behavior of the plurality of I/O devices to the at least one CPU and the system controller, (e.g., ¶ 0033 - 0035, 0054, It is understood that the “trapping” is merely memory/processor holding onto information so to perform a function of the invention on the data it is about to process.); and
21. the service processor being directly coupled to the I/O trap logic, the service processor being configured to receive the intercepted and trapped plurality of outputs from the I/O trap logic, to encapsulate the received plurality of outputs into the outgoing data frames, to transmit the outgoing data frames via the at least one LAN interface through the LAN for delivery to the plurality of I/O devices, to receive the incoming data frames via the at least one LAN interface sent by the plurality of I/O devices through the LAN, to de-encapsulate the received incoming data frames into the plurality of inputs, and to convey the plurality of inputs to the I/O trap logic for emulation to the at least one CPU via the system controller, (e.g., ¶ 0033 - 0035, 0054, It is understood that the “trapping” is merely memory/processor holding onto information so to perform a function of the invention on the data it is about to process. Furthermore, it is well known in the art the in order to communicate information in a computer network using the OSI

model of communication, one must encapsulate and "de-encapsulate" packets and frames in order for the application level to use the received information or to send information to another device in a network or LAN.),

22. wherein the emulation processor is arranged to encapsulate the plurality of outputs in any of Ethernet frames, Internet Protocol (IP) packets, (e.g., ¶ 0007),

23. but does not specifically teach wherein the plurality of computers and the console are arranged to encapsulate the input and output in any of Internet Protocol (IP) packets for transmission over the LAN and using an application-layer protocol,

24. wherein the emulation processor is arranged to encapsulate the plurality of outputs using an application-layer protocol.

25. Autrey teaches wherein the plurality of computers and the console are arranged to encapsulate the input and output in any of Internet Protocol (IP) packets for transmission over the LAN and using an application-layer protocol, (e.g., col. 2, lines 13 – 25 & col. 8, lines 3 – 24s);

26. wherein the emulation processor is arranged to encapsulate the I/O commands using an application-layer protocol, (e.g., col. 2, lines 13 – 25 & col. 8, lines 3 – 24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Autrey with Dai because if one is to test and run a network using an emulation, then one would need to test all layers of the OSI model so a user know that the complete network topology is working correctly and not just one or two layers.

27. Referencing the newly amended claim 39, as closely interpreted by the Examiner Dai teaches all that is similarly stated above herein claim 39. Furthermore, Dai and Autrey teach basic computer systems that would have a non-volatile memory that holds basic input/output system (BIOS) commands used by each of the plurality of computers during an initial stage of boot-up of each of the plurality of computers, the non-volatile memory being connected to the service processor and to the system controller via the emulation processor; and

28. a console for sending inputs to and receiving outputs from the computers via the LAN, the console comprising:

29. a keyboard and a mouse for sending inputs; and
a video display and an audio output for receiving outputs, wherein the plurality of peripheral devices comprises the console. It is well known by one of ordinary skill in the art at the time the invention was made that desk top computer utilize BIOS functions to start their computer and keyboards, mouse and video and audio outputs are part of everyday desktop computing systems and would have been within the ability of one of ordinary skill in the art to use a basic computer in a LAN network to communicate with others on the network.

Response to Arguments

30. Applicant's arguments with respect to claims 39 have been considered but are moot in view of the new ground(s) of rejection.

31. Applicant's arguments filed 03/10/2010 have been fully considered but they are not persuasive with regards to claim 38.

32. **In the Remarks**, Applicant argues in substance that the copending Application No. 12/062211 claims 1 – 37 have different scope than this application.

33. As to this Remark, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

34. **In the Remarks**, Applicant argues in substance that Dai and Autrey does not teach the limitations of claims 38 and 39.

35. As to this remark, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. ENGLAND whose telephone number is (571)272-3912. The examiner can normally be reached on Mon-Thur, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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